



COUNTY OF LOS ANGELES
DEPARTMENT OF MEDICAL EXAMINER-CORONER
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SUBJECT: REPORT BACK ON EXPANDED COVID-19 TESTING THROUGH THE
DEPARTMENT OF MEDICAL EXAMINER-CORONER

The primary role of the Department of Medical Examiner-Coroner (Department) is to investigate sudden and unexpected deaths and all death due to non-natural causes in Los Angeles County. During the COVID-19 pandemic, the Department has been testing individuals who fall under its jurisdiction and who are suspected of dying of COVID-19. However, in the case of individuals not investigated by the Department whose deaths occurred before testing could be considered or completed via the healthcare system, their families may have concerns as to whether or not COVID-19 played a role in their loved one's death. These concerns may arise from the risk of exposure to coronavirus.

The Department understands the fear and worry many families experience when their loved one suddenly dies, particularly if it is believed the cause of death is related to COVID-19. While the Department seeks to provide answers and closure, there are still limits to testing, including such variables as time, body accessibility and handling.

On May 26, 2020, the Los Angeles County Board of Supervisors (Board) directed the Department, in consultation with County Counsel, the Directors of Public Health and Health Services, and other relevant Departments, to report back to the Board in 14 days with criteria to determine the circumstances under which a recently deceased person may be tested for SARS-CoV-2 (the virus that causes COVID-19) and the procedures and protocols for testing, regardless of whether the Department has taken jurisdiction on the death. Additionally, the Department was instructed to provide options to make information available, such as through a website or phone number, for members of the public to contact the Department to determine if testing can be performed.

Accreditations:

National Association of Medical Examiners (Provisional)
California Medical Association-Continuing Medical Education
Accreditation Council for Graduate Medical Education

ANAB ISO/IEC 17025:2017 Forensic Science Testing Laboratories
Peace Officer Standards and Training Certified

Law and Science Serving the Community

Establishing Criteria for testing

It is important that the testing performed by the Department produce results that are valid and interpretable in the context of the death. In addition, there are several factors to consider in postmortem testing that are not relevant in the testing of living individuals.

1. The decedent must have had signs or symptoms consistent with COVID-19

The Department will continue to utilize the existing set of procedures for testing for SARS-CoV-2 in cases in which it has jurisdiction. Per guidelines from the Centers for Disease Control and Prevention (CDC), the California Department of Public Health (CDPH), and our own Department of Public Health (DPH), testing in the postmortem setting requires that the decedent have experienced symptoms consistent with COVID-19. We intend to apply this criterion to test requests for deaths in which the Department does not assert jurisdiction.

2. No more than 7 days since death and no external signs of decomposition

Testing should be performed within a certain amount of time following the death (postmortem interval ("PMI")). The CDC indicates that, based on available data from other coronaviruses, SARS-CoV-2 RNA may be detected up to three days after death. Anecdotally, the Department has had positive results in cases with longer PMIs. Given the natural decomposition process, the sensitivity of tests is expected to decrease with time. Even if a few positive tests are detected at long PMIs, the interpretation of a negative test result becomes more difficult with time. The Department will consider testing requests in decedents that have been dead for 7 days or less. The Department, in conjunction with DPH, has learned during this pandemic that testing that test results on decedents with decomposition are less reliable. Consequently, PMI will be a factor in considering whether tests will be performed in these cases.

3. The sample must be taken as a nasopharyngeal swab

The Department will only consider testing if a nasopharyngeal swab can be taken from the decedent. Although the CDC is capable of performing specialized tissue-based testing for SARS-CoV-2, these are considered special requests and require a significant amount of preparation work, including the requirement that an autopsy be performed.

4. Only molecular--based testing

Although antibody testing is being performed in certain settings, it does not provide results that can be used to reliably conclude a person was infected with COVID at the time of death. Furthermore, postmortem specimens are undesirable or unsuitable for antibody testing. Therefore, only molecular-based (i.e. virus genetic material) testing will be conducted.

5. The death must have occurred, and the body must be located, in Los Angeles County

In order to ensure the Department has the authority to be involved in these requests and to reduce potential travel time and preserve resources, testing will be considered on deaths that occurred in Los Angeles County and where the body is still in Los Angeles County.

6. The body should not have been embalmed

The process of embalming involves infusing chemicals into the body for the purposes of restoration and preservation. The chemicals include formaldehyde, which damages the molecular structure of biological elements, including viral particles. Although there are no published studies on the effect of formaldehyde on SARS-CoV-2 testing results, it would be reasonable to conclude that embalming would at least diminish the sensitivity of testing and call into question a negative result.

Who may request testing

Legal Next of Kin, as defined California Health and Safety Code section 7100, may request testing.

Handling of results

In cases where the Department has already taken jurisdiction, positive results are currently communicated to the next of kin and considered in the completion of the death certificate. In cases where the Department has not taken jurisdiction and is only conducting testing, the Department will provide results (positive or negative) to the requestor (next of kin). Positive results will also be made available to the physician responsible for completing the death certificate and to the Department of Public Health. That physician will then determine if the cause of death should be amended and if so, be responsible for doing so.

Ways the public can contact the Department to request testing

Those wishing to request SARS-CoV-2 testing on their loved one can do so by calling the Department at 323-343-0714.

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